tracts, the cerebello-spinal tracts, uniting the cerebellum with the anterior cornua of the cord and motor fibers belonging to the posterior longitudinal fascicle that arises from a group of cells just beneath the oculo motor nucleus. He also believes that descending fibers pass into the spinal cord from the nucleus rubrum and the nucleus of Flechsig. Of all these fibers the most important are the cortico-spinal group, and in the first stage of compression they alone are involved and give rise to the syndrome of spasmodic paraplegia. As the pressure increases, all the descending fibers become involved, paraplegia becomes flaccid, and the reflexes are lost. Further compression produced alterations in sensation, involving first the fibers conveying pain and heat sensation which pass up through the gray matter of the cord, and ultimately the fibers of muscle sense which occupy the columns of Goll and Burdach. Sometimes there is isolated disturbance of pain sensation while heat sensation remains normal, or the area of disturbance of pain sensation is more disturbed than the area of heat sensation. Van Gehuchten questions whether the same fibers convey both forms. It is curious that although the fibers of the posterior columns in the cerebellar tract are most resistant to compression, they are most susceptible to syphilitic disease. There are many exceptions to these general rules and several cases are quoted, mostly from the literature, in which either the sensory disturbances occurred first, or there was flaccid paralysis with exaggeration of the reflexes. In a few rare cases there are motor disturbances with exaggeration of one or other forms of sensation; that is to say, some form of hyperesthesia. This is probably caused by the zone of hyperesthesia described in Brown-Sequard's paralysis. This hyperesthesia has been explained by Martinotti, as a result of the lesion of a narrow band of fibers that is situated in the angle between the anterior and posterior cornua. In all cases of total transverse destruction of the cord, hyperesthesia is absent. SAILER.

36. DES NÉVRALGIES ET TICS DE LA FACE CONSIDÉRÉS DANS LEURS RAPPORTS AVEC UN ÉTAT PATHOLOGIQUE DES VOIES LACRYMALES (The Neuralgias and Tics of the Face Considered in Their Relation with a Pathologic Condition of the Lachrymal Ducts). P. Bettremieux (Archives provinciales de médecine, Vol. 1, No. 10, October, 1899, p. 703).

The writer believes that there is a pathogenic relation between the neuralgias and tics of the face and diseased conditions of the lachrymo-nasal mucous membrane. He reports nine cases, four of neuralgia, three of tic convulsif, and two of tic douloureux, in which the results of his treatment tend to uphold his opinion. Of these nine cases, a marked improvement, or cure, was obtained in six, no result was obtained in one, and two were lost sight of. In nearly all of these cases there was increased lachrymation on the affected side, which had not been noticed by the patient. The treatment consisted of either simple catheterization of the lachrymal duct, catheterization with injections of nitrate of silver solution or some other antiseptic, or the passage of sounds in the duct followed by injections. There was almost immediate relief from pain in those cases in which it had been present after one treatment, and convulsive movements were diminished in severity. It seemed in some cases to be necessary to keep up the treatment for some time, or the trouble would return. Those cases which were not cured enjoyed a longer respite between the attacks, which also were not so severe as formerly. Bettremieux concludes that the lachrymo-nasal mucous membrane, if diseased, may be the seat of neuralgias and tics of the face, and that this lesion may be superficial, without any accompanying lachrymation, so that the relation between the cause and effect is not apparent. Such cases ought to be examined thoroughly. He thinks that neuralgias and tics of the face should be considered as pathologic reflexes, and that the origin of these reflexes should be sought for, especially in the region of the lachrymal ducts, before having recourse to surgery which only interrupts the reflex circuit. BONAR.

37. OPHTHALMOPLEGIA INTERNA BEI MIGRAINE OPHTHALMOPLÉGIQUE (Internal Ophthalmoplegia in Ophthalmoplegic Migraine). E. Troemmer (Centralblatt für Nervenheilkunde und Psychiatrie, Oct., 1899, p. 577).

A woman of thirty-eight years of age had headaches since her twenty-first year, with the exception of a period of five years. The mother and sister of the patient also had headache. The patient's pain was sometimes on the right side of the head and sometimes on the left; it began almost every day in the morning, and was often associated with redness and swelling of the cheek and ceased after or during a long sleep. The headache, which had almost disappeared during a period of five years, returned after a fright caused by the sudden death of the patient's husband. On the second or third day after the pain again began the woman noticed that the vision of the right eye was impaired and that the right pupil was very large. Examination showed that the right pupil did not react to light or in convergence and reacted very imperfectly in accommodation. After three or four months considerable improvement in the ophthalmoplegia occurred. No other case of internal ophthalmoplegia associated with migraine seems to have been reported. SPILLER.

38. UEBER PERONEUSLÄHMUNG BEI TABES (Concerning Paralysis of the Peroneal Nerve in Tabes). Finkelnburg (Monatsschrift für Psychiatrie und Neurologie, Vol. 6, No. 4, Oct. 1899, p. 286).

Peroneal paralysis has occasionally been seen in cases of tabes dorsalis. Finkelnburg reports two cases in which the paralysis in the distribution of the peroneal nerve resulted from pressure, therein differing from the other cases of tabetic peroneal paralysis in the literature. In the first case the pressure was caused by the position of the legs maintained for a long time, but alcoholism and tabes rendered the peroneal nerve more liable to injury from slight pressure. In the second case an arthropathy of the knee caused pressure on the peroneal nerve. SPILLER.

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39. UEBER DAS GONOCOCCENTOXIN UND SEINE WIRKUNG AUF DAS NERVENSYSTEM (On the Gonococcus Toxine and Its Action on the Nervous System). Maltschauoff (Münchener medicinische Wochenschrift, 46, 1899, No. 31, p. 1013).

The author describes the changes found in the nervous system after the action of gonococcus toxine; in white mice, guinea pigs and rabbits.

As a culture medium for the gonococcus he used peptone agar, with hydrocele fluid, while for toxine production, the organism was allowed to grow in a mixture of equal parts of bouillon and hydrocele fluid. Cultures, 20 to 25 days old, in which the cocci had been killed by heating at 70° C. for 15 minutes, but which were used unfiltered, were found by the author to be most toxic.